

### **DRAWING AMENDMENTS**

In the interests of expediting the prosecution of the instant application, and without admission that any amendment is necessary, the Applicants have amended the drawings to correct typographical errors with respect to the reference characters contained in Figs. 72A, 77A, 82A, 87A, 92A, 97A, 102A, 107A, 112A, 117A, 122A, 127A, 132A, 137A, 142A, 147A, 152A and 157A. The Applicants aver that no new matter has been introduced.

Replacement sheets containing the aforementioned amended figures are submitted concurrently herewith.

### **REMARKS/ARGUMENTS**

Claims 1-109 are pending.

Claims 1-109 are rejected.

Claims 2, 6, 9, 16, 19, 22, 28, 29, 34, 41, 45, 48, 55, 57, 61, 62, 67, 75, 78, 81, 87, 88, 95, 101 and 109 have been amended. Support for these amendments can be found throughout the specification and drawings, as originally filed.

New claims 110-148 have been added. Support for these claims can be found throughout the specification and drawings, as originally filed.

The specification has been amended to correct various typographical errors. Support for these amendments can be found throughout the specification and drawings, as originally filed. The Applicants aver that no new matter has been added.

### **DRAWING AMENDMENTS**

The drawings stand objected to under 37 C.F.R. 1.84(p)(5).

The Applicant respectfully traverses the 37 C.F.R. 1.84(p)(5) objection to the drawings.

In the interests of expediting the prosecution of the instant application, and without admission that any amendment is necessary, the Applicants have amended the drawings to correct typographical errors with respect to the reference characters contained in Figs. 72A, 77A, 82A, 87A, 92A, 97A, 102A, 107A, 112A, 117A, 122A, 127A, 132A, 137A, 142A, 147A, 152A and 157A, specifically those reference characters referring to the optional supply coil system and take-up coil. The Applicants aver that no new matter has been introduced.

Replacement sheets containing the aforementioned amended figures are submitted concurrently herewith.

Accordingly, the Applicants submit that the objection to the drawings under 37 CFR 1.84(p)(5) has been overcome.

### **35 USC §102(b) REJECTION**

Claims 1-86 and 94-109 stand rejected under 35 USC §102(b) as being anticipated by U.S. Patent No. 4,330,352 to Grimes et al.

The Applicants respectfully traverse the 35 USC §102(b) rejection of claims 1-86 and 94-109.

The law is clear that anticipation requires that a single prior art reference disclose each and every limitation of the claim sought to be rejected. 35 U.S.C. §102(b).

The law is also clear that a claim in dependent form shall be construed to incorporate all the limitations of the claim to which it refers. 35 U.S.C. §112 ¶ 4.

Grimes et al. does not teach the structure or methodology of the invention as claimed in any of independent claims 1, 15, 28, 40, 52, 61, 74, 94 and 104, or the claims dependent therefrom.

The Examiner correctly noted that Grimes et al. is silent with respect to the tensile strength of the carrier layer at 300°F.

The carrier film 4 taught by Grimes et al. does not correspond to the support film of the instant application, as it does not perform the same function thereof. The carrier film 4 is merely used as a means for carrying the protective release coating 5 to the metallized transfer laminate 10. The carrier film 4 is then removed from the laminate prior to the laminate coming into contact with the intended substrate (e.g., see Figs. 3

and 4). Thus, it is unclear how the carrier film 4 can possibly perform a support function if it is removed prior to affixation to the intended substrate. In fact, the carrier film 4 does not appear to perform any “support” function, and certainly does not perform the support function of the support layer of the claimed invention.

Furthermore, there is no mention of thermoforming operations by Grimes et al. and certainly no mention of the carrier film 4 being involved with any thermoforming operations. Assuming *arguendo* that Grimes et al. did indeed teach that the laminate is to be thermoformed with a substrate, the carrier film 4 has already been removed by that stage, thus it cannot possibly perform a support function because it is not present. Regardless, Grimes et al. appears to only teach the use of pressure sensitive adhesives to affix the laminate to the desired substrate.

Additionally, the limitation that the support film has a tensile strength greater than 0.5 pli at 300°F is not taught or inherent in the disclosure of Grimes et al. While Grimes et al. may arguably disclose the use of a polyvinyl fluoride as the carrier film 4, it is not clear at all that the polyvinyl fluoride material possesses the mechanical properties as claimed, even if the disclosed thicknesses appear to overlap somewhat to those described in the instant application. Even so, as previously noted, the carrier film 4 does not correspond to the claimed support film, thus any assertion of inherent tensile strength at a given temperature is moot.

With respect to those claims reciting a second thermoformable film, the relevant claims have been amended to more clearly define the claimed invention. As Grimes et al. is completely silent regarding a first thermoformable film, and certainly is silent regarding the use of a second thermoformable support film, these claims are clearly not anticipated by Grimes et al.

With respect to those claims reciting the release layer, the relevant claims have been amended to more clearly define the claimed invention. As Grimes et al. does not provide for any means for removing the release layer 5 from the surface of the laminate, it is certainly clear that the release layer cannot be peeled away from the substrate, as presently claimed. As Figs. 3 and 4 of Grimes et al. demonstrate, the release layer 5, if present, is intended to be disposed under one or more additional layers (e.g., tie coat 6, pressure sensitive adhesive 7, and/or release liner 8) of the laminate. Thus, any attempted removal of the release layer 5 (even those methods suggested by the Examiner) would most likely destroy the laminate itself and/or the surface finish thereof.

Thus, Grimes et al. does not anticipate independent claims 1, 15, 28, 40, 52, 61, 74, 94 and 104. Furthermore, claims 2-14, 16-27, 29-39, 41-51, 53-60, 62-73, 75-86, 95-103 and 105-109, which are dependent upon and further define independent claims 1, 15, 28, 40, 52, 61, 74, 94, and 104, respectively, are likewise not anticipated by Grimes et al.

Accordingly, the Applicants contend that the 35 U.S.C. §102(b) rejection of claims 1-86 and 94-109 has been overcome.

Furthermore, the Applicants contend that Grimes et al. do not render claims 1-86 and 94-109 obvious.

The standard for obviousness is that there must be some suggestion, either in the reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention. In addition, "[s]omething in the prior art as a whole must suggest the desirability and, thus, the obviousness, of making" the modification to the art suggested by the Examiner. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 U.S.P.Q.2d (BNA) 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988). Although

the Examiner may suggest the teachings of a primary reference could be modified to arrive at the claimed subject matter, the modification is not obvious unless the prior art also suggests the desirability of such modification. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q.2d (BNA) 1397, 1398 (Fed. Cir.1989). There must be a teaching in the prior art for the proposed combination or modification to be proper. *In re Newell*, 891 F.2d 899, 13 U.S.P.Q.2d (BNA) 1248 (Fed. Cir. 1989). If the prior art fails to provide this necessary teaching, suggestion, or incentive supporting the Examiner's suggested modification, the rejection based upon this suggested modification is error and must be reversed. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d (BNA) 1566 (Fed. Cir. 1990).

As previously noted, the carrier film 4 disclosed by Grimes et al. does not correspond to the support film of the instant application, as it does not perform the same function thereof. The carrier film 4 is merely used as a means for carrying the protective release coating 5 to the metallized transfer laminate 10. The carrier film 4 is then removed from the laminate prior to the laminate coming into contact with the intended substrate (e.g., see Figs. 3 and 4). Thus, it is unclear how the carrier film 4 can possibly perform a support function if it is removed prior to affixation to the intended substrate. In fact, the carrier film 4 does not appear to perform any "support" function, and certainly does not perform the support function of the support layer of the claimed invention.

Also as previously noted, there is no suggestion of thermoforming operations by Grimes et al. and certainly no suggestion of the carrier film 4 being involved with any thermoforming operations. Assuming *arguendo* that Grimes et al. did indeed suggest that the laminate is to be thermoformed with a substrate, the carrier film 4 has already been removed by that stage, thus it cannot possibly perform a support function because

it is not present. However, Grimes et al. appears to only disclose the use of pressure sensitive adhesives to affix the laminate to the desired substrate.

Furthermore, as previously noted, the limitation that the support film has a tensile strength greater than 0.5 pli at 300°F is not suggested or inherent in the disclosure of Grimes et al. While Grimes et al. may arguably disclose the use of a polyvinyl fluoride as the carrier film 4, it is not clear at all that the polyvinyl fluoride material possesses the mechanical properties as claimed, even if the disclosed thicknesses appear to overlap somewhat to those described in the instant application. Even so, as previously noted, the carrier film 4 does not correspond to the claimed support film, thus any discussion of inherent tensile strength at a given temperature is moot.

With respect to those claims reciting a second thermoformable film, the relevant claims have been amended to more clearly define the claimed invention. As Grimes et al. is completely silent regarding a first thermoformable film, and certainly is silent regarding the use of a second thermoformable support film, these claims are clearly not rendered obvious by Grimes et al.

With respect to those claims reciting the release layer, the relevant claims have been amended to more clearly define the claimed invention. As Grimes et al. does not provide any means for removing the release layer 5 from the surface of the laminate, it is certainly clear that the release layer cannot be peeled away from the substrate, as presently claimed. As Figs. 3 and 4 of Grimes et al. demonstrate, the release layer 5, if present, is intended to be disposed under one or more additional layers (e.g., tie coat 6, pressure sensitive adhesive 7, and/or release liner 8) of the laminate. Thus, any attempted removal of the release layer 5 (even those methods suggested by the Examiner) would most likely destroy the laminate itself and/or the surface finish thereof.

Therefore, one of ordinary skill in the art would not look to Grimes et al. and/or Johnson et al., either alone or in combination therewith, for guidance on forming and/using a thermoformable support film as presently claimed.

Thus, Grimes et al. and/or Johnson et al., either alone or in combination therewith, do not anticipate independent claims 1, 15, 28, 40, 52, 61, 74, 94 and 104. Furthermore, claims 2-14, 16-27, 29-39, 41-51, 53-60, 62-73, 75-86, 95-103 and 105-109, which are dependent upon and further define independent claims 1, 15, 28, 40, 52, 61, 74, 94, and 104, respectively, are likewise not anticipated by Grimes et al.

Accordingly, the Applicants contend that the 35 U.S.C. §102(b) rejection of claims 1-86 and 94-109 has been overcome.

### **35 USC §103(a) REJECTION**

Claims 1-109 stand rejected under 35 USC §103(a) as being anticipated by U.S. Patent No. 4,330,352 to Grimes et al. in view of U.S. Patent No. 5,518,786 to Johnson et al.

The Applicants respectfully traverse the 35 USC §103(a) rejection of claims 1-109.

The Examiner correctly re-acknowledged that Grimes et al. is silent with respect to the tensile strength of the carrier layer at 300°F. The Examiner also correctly noted that Grimes et al. does not teach the use of a release layer that remains with the carrier layer when the carrier layer is stripped from the laminate.

As previously noted, there is no suggestion of thermoforming operations by Grimes et al. and certainly no suggestion of the carrier film 4 being involved with any thermoforming operations. Assuming *arguendo* that Grimes et al. did indeed suggest



that the laminate is to be thermoformed with a substrate, the carrier film 4 has already been removed by that stage, thus it cannot possibly perform a support function because it is not present. However, Grimes et al. appears to only disclose the use of pressure sensitive adhesives to affix the laminate to the desired substrate.

Furthermore, as previously noted, the limitation that the support film has a tensile strength greater than 0.5 pli at 300°F is not suggested or inherent in the disclosure of Grimes et al. While Grimes et al. may arguably disclose the use of a polyvinyl fluoride as the carrier film 4, it is not clear at all that the polyvinyl fluoride material possesses the mechanical properties as claimed, even if the disclosed thicknesses appear to overlap somewhat to those described in the instant application. Even so, as previously noted, the carrier film 4 does not correspond to the claimed support film, thus any discussion of inherent tensile strength at a given temperature is moot.

With respect to those claims reciting a second thermoformable film, the relevant claims have been amended to more clearly define the claimed invention. As Grimes et al. is completely silent regarding a first thermoformable film, and certainly is silent regarding the use of a second thermoformable support film, these claims are clearly not rendered obvious by Grimes et al.

With respect to those claims reciting the release layer, the relevant claims have been amended to more clearly define the claimed invention. As Grimes et al. does not provide any means for removing the release layer 5 from the surface of the laminate, it is certainly clear that the release layer cannot be peeled away from the substrate, as presently claimed. As Figs. 3 and 4 of Grimes et al. demonstrate, the release layer 5, if present, is intended to be disposed under one or more additional layers (e.g., tie coat 6, pressure sensitive adhesive 7, and/or release liner 8) of the laminate. Thus, any

attempted removal of the release layer 5 (even those methods suggested by the Examiner) would most likely destroy the laminate itself and/or the surface finish thereof.

The recitation of Johnson et al. does not cure the afore-mentioned deficiencies in the teachings of Grimes et al. While Johnson et al. may arguably disclose the use of a carrier sheet having a silicone release surface or a thin film of wax, the reference, like Grimes et al., is merely directed to a dry transfer laminate system and does not disclose thermoformable materials and/or techniques whatsoever. As with Grimes et al., Johnson et al. relies on a pressure sensitive adhesive technique to bond to a substrate. As Johnson et al. discloses that it is useful for adhering to "three-dimensionally contoured surfaces," it must be presumed that the substrate has already been formed prior to affixation of the laminate system. Thus, the laminate system plays no role in the formation of the substrate, and certainly plays no role in the formation of a thermoformed substrate.

Thus, one of ordinary skill in the art would not look to Grimes et al. and/or Johnson et al., either alone or in combination therewith, for guidance on forming and/or using a thermoformable support film as presently claimed.

Therefore, Grimes et al. and/or Johnson et al., either alone or in combination therewith, do not render independent claims 1, 15, 28, 40, 52, 61, 74, 87, 94 and 104 obvious. Furthermore, claims 2-14, 16-27, 29-39, 41-51, 53-60, 62-73, 75-86, 88-93, 95-103 and 105-109, which are dependent upon and further define independent claims 1, 15, 28, 40, 52, 61, 74, 87, 94, and 104, respectively, are likewise not rendered obvious by Grimes et al. and/or Johnson et al., either alone or in combination therewith.

Accordingly, the Applicants contend that the 35 U.S.C. §103(a) rejection of claims 1-109 has been overcome.

### CONCLUSION

In view of the foregoing, the Applicant respectfully requests reconsideration and reexamination of the Application. The Applicant respectfully submits that each item raised by the Examiner in the Office Action of August 1, 2005 has been successfully traversed, overcome or rendered moot by this response. The Applicant respectfully submits that each of the claims in this Application is in condition for allowance and such allowance is earnestly solicited.

The Examiner is invited to telephone the Applicant's undersigned attorney at (248) 364-4300 if any unresolved matters remain.

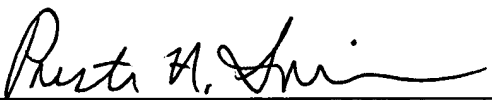
Any needed extension of time is hereby requested with the filing of this document.

The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 501612.

Respectfully submitted,

**WARN, HOFFMANN, MILLER & LALONE, P.C.**  
Attorneys for Applicant(s)

Dated: 11/1/05

By:   
Preston H. Smirman (Reg. No. 35365)

P.O. Box 70098  
Rochester Hills, Michigan 48307  
Telephone: (248) 364-4300  
Fax: (248) 364-4285